

CRYOGEN-FREE HIGH TEMPERATURE  
SUPERCONDUCTING MAGNET WITH  
THERMAL RESERVOIR

ABSTRACT OF THE DISCLOSURE

A cryogen free superconducting magnet assembly having a high  $T_c$  superconducting magnet and a thermal reservoir in thermal contact with the high  $T_c$  superconducting magnet. A method of cooling a cryogen free superconducting magnet assembly and an MRI system having cryogen free superconducting magnet assemblies.